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HÆMORRHAGIA, OR HÆMORRHAGE.

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[Reported for this Journal.]

Conformably to its etymology, the term hæmorrhage embraces every effusion of blood, however induced. Five modes have been assigned in which it may take place, by rhexis or rupture of a vessel, by diaresis or division of it, by diabrosis or erosion of its coats, by diapedesis or transudation through them, and by anastomosis, or dilatation of the mouths of the exhalents, so as to allow the blood to escape.

Founded in part, on the supposed modes of its production, an arrangement was early made of hæmorrhage into traumatic, as occasioned by wounded vessels, and into spontaneous, when occurring without such vascular injuries. But more accurately expressive of the two distinctions, are the terms physical and vital, lately introduced, these, indeed, denoting with sufficient precision, the nature of the lesions on which the sanguineous emissions depend.

Custom having hitherto resigned the physical hæmorrhages to the province of surgery, I shall, in obedience to it, do the same,—limiting the ensuing inquiry, therefore, to the other description of the affection. Corresponding more exactly, in my opinion, with a just pathology of vital hæmorrhages than any previous classification of them, it is my intention to distribute the subject under the titles of *active*, less *active*, and *passive*, thereby indicating the several gradations of the hæmorrhagic states. The symptoms, of course, vary as connected with one or the other of these conditions. In the first, it happens that the effusion takes place, with little or no premonition, though, perhaps, as frequently, it is preceded by a full, and somewhat struggling pulse, heat and redness of surface, with a sense of congestion in the part whence the blood is to be eliminated. On other occasions, it presents more of the intermittent character, being ushered in by a chill, followed by fever, ceasing with the subsidence of this excitement, and reverting on a recurrence of it. The law of periodicity may be very strictly observed, in regard to the order of the paroxysms. Cases are recorded of hæmorrhage in all its locations, returning daily, every other day, and at more distant intervals. Generally, however, the febrile condition is steady, or, at least, there are continued manifestations of an increased force of the circulation, and undue local determinations.

The effects of hæmorrhage depend mainly, on the quantity of the effusion, the rapidity with which it takes place, the part whence it proceeds, and the capacity to bear the debilitating process. No one doubts the influence of the two first causes,—and, I think, that of the others is scarcely less apparent. Thus, a few ounces of blood from the nostrils, or the rectum, will sometimes induce syncope, or a disposition to it, and by even moderate repetitions of such bleedings in either case, for any length of time, depravations inevitably follow. Coming, on the contrary, from the mucous tissue of the lungs or the uterus, though a much larger amount be lost, there are no such results immediate, or remote, and certainly, not to the same extent. Equally is it true, that while some persons will sustain an immense loss without any ostensible injury, others instantly sink under very slight effusions, or have entailed a lengthened suffering,—and this shall happen where no material difference between them is discernible in vigour or integrity of constitution. The same disparity, in this respect, may be observed in relation to the effect of venesection, or topical bleeding, ascribable altogether, as in the former instance, to some idiosyncracy not always intelligible. Many instances to this purport, have I seen.

In active hæmorrhage, however, where the flow is moderate, and escapes through the natural passages, great relief is afforded to the existing symptoms, and a renewal of the hæmorrhage usually prevented. But when the loss of blood is disproportioned to the exigency, and, of course, still more, when exceedingly profuse, or rapidly emitted, the action of the heart and vessels is so reduced as scarcely to be recognised,—the surface becomes cold, collapsed, and pallid, the respiration quick and embarrassed, chills or rigours take place, followed by distraction of the senses, dimness of vision, ringing in the ears, with nervous tremors, some cerebral confusion, and, ultimately, syncope, or, perhaps, fatal convulsions. Yet after a while, reaction commonly ensues, attended by a quick, hard, irritated pulse, alternate chills and flushes, or a more permanent and unequal distribution of temperature, and, very often, by repetitions of the hæmorrhage to a greater or less extent. Extreme perturbation, however, of body and mind, is sometimes now betrayed,—the countenance becomes florid or pale in rapid succession, the tongue furred, the skin hot and dry, the whole circulatory machinery acts anormally,—and the pulse simulates by its impetus, its fulness, and even its tenseness, the real synochal state.

Enduring in this way for any length of time, the consequences of the hæmorrhage are exceedingly serious, amounting nearly to an universal disorder of the functions of the animal economy. The aspect is that of confirmed and inveterate dyscracy, pale, sallow, or livid in patches—sometimes bloated, particularly the face—the circulation being accelerated and feeble, though apt still to be tumultuous on any mental or corporeal

agitation. Cerebral excitement, indicated by intolerance of light or sounds, or by slight delirium, is indeed very common.

Not, arrested, the case rapidly advances with an aggravation of the foregoing symptoms. To increased exhaustion, there are added greater embarrassments of breathing, sluggishness of body, obtuseness of mind, drowsiness, more violent throbbings of the arteries, and palpitations of the heart on any exertion or emotion, with considerable irritation in the mucous lining of the alimentary and pulmonary passages, deficient urination; and, where death does not promptly take place, dropsy of the cellular tissue, or of the cavities, or of both, results, which more slowly leads to the same catastrophe.

Much of this account is applicable to the *less active* hæmorrhages. They differ, however, materially in their early symptoms. Connected from the beginning with a reduced, attenuated, and frequently depraved state of the system, and rarely preceded or accompanied by any of the signs of the *motimen hæmorrhagicum*, the train of secondary phenomena I have noticed are almost constantly evinced by any undue loss of blood, and hurry on with more rapid speed to the final termination which has been described.

Nothing scarcely need now be said of *passive* hæmorrhages, since the circumstances in which they occur, and the mode of production to be immediately detailed, are calculated to shed sufficient light on them at present, without any formal recital of their history.

As might be conjectured, they are mostly the effect of the lowest state of vitality, whether induced by acute or chronic distemperatures,—and occurring in such general pravities of system, are usually very pervading, the effusions coming from several parts, or indeed, as I have seen, from nearly the whole body, simultaneously. Lucan says of them:

"Sanguis erant lacrymæ: quacunque foramina novit
Humor, ab his largus manat cruor: ora redundat,
Et patulæ nares: sudor rubet: omnia plenis
Membra fluunt venis: totum est pro vulnere corpus."

Finally, I am to advert to a species or variety of hæmorrhage, which seems peculiar in its character: my allusion is to those cases where the effusion recurs at stated intervals, sometimes with the exactness of well regulated menstruation, though, perhaps, rather incident to males than females—preceded nor attended by any manifestation of disease, except the sense of local fulness—nearly always issuing from the same part, and a similar quantity of blood escaping each time, the prevention or checking of which is followed by detriment to health. Examples I shall hereafter adduce, of such effusions taking place in many of the organs and structures of the body.

To exhibit a complete view of hæmorrhage, it were required to notice also those sanguineous extravasations to which occluded cavities are liable. But these have been separated as distinct diseases, and, agreeably to established usage, they will be considered by me under the heads of apoplexy, &c.

Tracing the etiology of hæmorrhage, it will be perceived, that there is the greatest liability to it about the age of puberty, when a redundancy of blood exists. As on the completion of an edifice, there is left a surplus of materials to be disposed of, so, on the cessation of the growth of the body, an excess of blood remains, sometimes removed in this way. But the tendency of hæmorrhage to its several localities, seems to be considerably influenced by the stages of life. Childhood and adolescence are prone to effusions from the nose,—for sometime afterwards they proceed from the lungs,—in middle age, the alimentary canal and the brain afford the outlet—and, from the kidneys or bladder, they are most frequently met with at a still later period. But since, in the progress to maturity, the different parts of the body may be unequally developed, and as, subsequently, changes take place from disease, or otherwise, having a similar effect, many exceptions will be found to this general rule. Nevertheless, peculiar conformations of structure no doubt predispose to particular hæmorrhages. Thus, among other instances, the short neck, and large head, invite to epistaxis or apoplexy—while the narrow, ill-shaped chest, does equally so to hæmoptysis. Certain persons, too, are singularly liable to the disease, and from different portions of the body, in whom nothing is discernible in the exterior configuration to afford an explanation. Nor is it uncommon for whole families to be thus distinguished, and who, in some instances, seem to derive the peculiarity by inheritance. An unusual want of tone in the coats of the extreme vessels, or some anomaly in their arrangement,—by which their capacity is less to resist the occasional momentum in the movements of the blood,—has here been suspected. Cases of this sort, are more frequent in scrofulous habits, where laxity in the structure of the vessels usually exist, but without any proof of such diathesis, it occurs occasionally—the hæmorrhage spontaneously bursting forth, or following the slightest wound, even an incision of the gum, or a cut of the finger, and persisting so obstinately as to prove very difficult, or not at all, to be restrained. Numerous instances of the kind, are recorded—some of which are collected in Andral's work on Pathological Anatomy, and in an Essay on the subject, by Dr. Reynell Coates, in the North American Medical Journal.

As conducive to an increased proclivity to hæmorrhagic occurrences, much is ascribed to an habitual fullness of body, and particularly where the circulation is redundant with rich blood. That such a state tends to this effect, cannot be denied, though the reverse is scarcely less true, or that it is frequently incident to attenuated habits, and where the blood is scanty and impoverished. Each condition leads to it, provided the balance in the circulation is prone to subversion, it being, under these circumstances, the consequence of unequal concentrations of blood, rather than of its quantity or quality.

But other pathological states, in which the

blood undergoes still greater changes,—its consistency being so completely broken down, as to be rendered a very thin fluid, easily escaping through the exhalents,—conduce, also, to this event, and independently of any previous local accumulations. Blood, of this sort is met with in scurvy, low malignant fevers, and various other diseases, or as the effect of accidental inanition, or a penurious diet, depressing passions, the want of fresh air, or external exercise, or of solar heat and light, or whatever else affects the nerves more immediately concerned in the secretory and nutritive processes. Certain articles, taken into the system, seem especially to exercise a sort of specific operation in causing such a state of the blood. The experiments of Starke show that living long on sugar produces it, and we have reason to suppose, that the exorbitant or continued use of the neutral salts, particularly common salt, as well as the alkalies, have the same tendency. As regards common salt, we see a striking proof of it in the production of scurvy with blood of this kind. The contrary, I know, has lately been maintained by Stephens, whose authority is to be respected. It is, also, very speedily occasioned by some poisons taken internally, and by the bites of numerous venomous serpents, and even by the stings of several insects. The foregoing are what I mean by *passive* hæmorrhage.

To the causes mentioned, others are to be added of a nature accidental, accessary, or exciting, as whatever, indeed, is calculated to invigorate or quicken the circulation, or to direct or concentrate its force on any one part or organ of the body. The most prominent of these are:—

1st. Extreme heat, the operation of which is witnessed on the first accession of the warmth of spring or during, the intense heat of summer, and most conspicuously in persons who carry on their occupations in close stove-rooms, or work immediately over fires. It acts here, in the first place, merely as a stimulant accelerating the circulation, and, secondly, by relaxing the integuments which support the extreme vessels.

2d. Cold to the surface. The mode of its action is different under opposite circumstances. Being suddenly applied, as in the shower or plunging bath, a vast shock is given to the system, and a corresponding impetus to the circulation with a centripetal direction. But where the application is gradual, there is an accumulation of susceptibility, and a reaction, with febrile excitement, on an exposure to heat, or any other stimulant.

3d. Diminution in the weight or density of the atmosphere. The effect of it is illustrated chiefly in the ascent of elevated positions, and which, I am aware, has been imputed merely to inordinate exertion. We are, however, told by De Saussure, who went to the top of Mont Blanc, the highest point of the Alps, that in a state of rest, among other effects which he experienced from the rare atmosphere, the blood gushed from his nose, ears, and gums; and which is fully corroborated by Baron Humboldt, by whom the mountains of South America were ascended to their utmost pinnacle. It is, perhaps, wholly ascribable to deficient atmospherical pressure.

4th. Exertions inordinately violent, and other excitants, conduce to the same end,—as running, leaping, fighting, lifting heavy weights, or eating or drinking in excess, or vomiting, coughing, or sneezing, or bent positions of the head or body, or ligatures retarding the return of the blood, or the suppression of discharges from issues, or setons, or ulcers, the repercussion of cutaneous eruptions, or vehement gusts of passion, or emotions of any sort, or ardent venereal desires kept from indulgence, &c. Caused, however, in some of these modes, the case might not, perhaps, come within the definition of spontaneous or vital hæmorrhage, which, as I have stated, must be independent of external violence.

5th. Hæmorrhage may be owing to various morbid conditions of parts from which it immediately proceeds, or as consequential on similar states of other and remoter organs. Many of the lesions of the lungs operate to this effect, those of the heart still more, and of the liver, spleen, kidneys, and uterus, in nearly an equal degree. It is plain, that the circulation in the main vessels of an organ being impeded, the capillaries of it must become distended with blood, promotive of effusions.

6th. Gastric and intestinal irritation, especially from the habit of constipation, exerts a similar influence by inviting an excess of blood to the parts, and that of the mucous surface of the lungs from inhalations of acrid particles, or by other irritants, among which are an elongation of the uvula, enlargement of the tonsils, and ulceration of the fauces, by an extension of irritation to the pulmonary tissue.

7th. Further, it may be remarked, that hæmorrhage is prone to the shifting of position, and thus bursts forth in another part—occasioned by the sudden suppression of sanguineous discharges from artificial interference, or by the course of blood being elsewhere solicited by a higher degree of irritation, creating a predisposition to such an afflux, as among other instances, on checking the nasal, uterine, and particularly the hæmorrhoidal effusion, hemoptysis, hematemesis, or apoplexy, has speedily ensued. This is the hæmorrhage from metastasis, which, on some occasions, is very profuse.

Each of the preceding states of hæmorrhage is obviously referrible to some positive lesion. But this is not so clear in relation to those habitual discharges to which I have just alluded, so regular in their repetitions, and salutary in their tendencies. These seem to be owing to some original, inherent, constitutional idiosyncracy, by which a particular organ is made, as it were, an emunctory, to drain off a pernicious excess of blood.

No disease can be mistaken for hæmorrhage, and hence it were superfluous to say a word on the signs of discrimination. It may, however, be useful in a practical view, to indicate the

means by which the different pathological states of the affection itself are to be recognised. Even here a very few remarks will suffice. Let it be recollected, as a general guide, that, in the most active form, there is the evidence of a strong febrile circulation, with redundant florid blood, abounding in crassamentum, and readily coagulating: in the less active, the reverse in a great degree of these appearances, it being thinner, dark coloured, and seldom firmly clotted,—while, in the passive, to extreme debility is united either ensanguineousness, or the blood exhibits a vast excess of serum, or otherwise is more fluid and black.

Not a little may be learned in speculating on the probable issue of the case from what has been previously said. The circumstances heretofore pointed out as influencing the event, should be carefully regarded. But, above all, we must attend to the pathological condition by which the effusion is excited and maintained. Excepting the emission be into occluded cavities, an active hæmorrhage may mostly be deemed critical and salutary, and can only operate otherwise, by excess at the moment, or by too long prevalence. There is ordinarily integrity of constitution, and relief is afforded to an oppressive degree of repletion. For the most part, different are the effects of the weaker hæmorrhages. No further expenditure of blood is here scarcely ever admissible.

An absolutely passive hæmorrhage, is always to be dreaded, it denoting a condition of things from which recoveries seldom take place. Chronic hæmorrhages, as arising usually from some permanent irritation, are also of evil import—not so much, however, on account of their copiousness, as the organic lesion of which they are the effect.

The anatomical characters of hæmorrhages, as revealed on dissection, are considerably modified by the causes, and the seats of the affection, the gradations of its activity, or its passive nature, and by the duration of the attack. These considerations, with the summary I am now to offer, will suggest a general notion of their appearances, and on coming to the description of the special hæmorrhages, I shall describe them more precisely.

An acute hæmorrhage, when profuse, sometimes leaves the tissue from which it has emanated in a natural condition, the pre-existing congestion or inflammation having been removed by the draining out of the blood, or owing to the same cause, it may be preternaturally pallid and flaccid. Generally, however, the pathological conditions mentioned, are met with in various degrees,—sometimes the phlogosis is intense and diffused, sometimes only stellated or streaked,—while, on other occasions, the vessels are merely turgid, or ecchymosed blotches, of different sizes, are discoverable. It has been said, that similar lesions are pretty constantly found in the brain, though not the seat of the effusion, and which might be presumed from the convulsions and other cerebral affections, caused by excessive losses of blood. Experiments, in which animals were bled to death, have indeed shown, that the tissues of that organ, as well as those of other structures, and particularly the mucous surfaces, are almost invariably engorged, and hence a doubt may arise, how far such a state be the cause or consequence of the hæmorrhagic effusion.

Chronic hæmorrhages more uniformly present the phenomena of inflammation, or its effects, in the thickening, or other changes of texture, with diverse other structural derangements, considerably influenced by the character of the organ affected. Not much is known of the lesions of the solids in passive hæmorrhage,—the most notable alterations in these cases being in the circulating fluids, as previously indicated. But they may be conjectured from the nature of the diseases on which they are dependent.

In entering on the examination of the pathology of hæmorrhage, it is proper to state that it can be correctly viewed only as an effect of a pre-existing anormal condition, which, in reality, constitutes the disease. Diversified as the causes of it are, they unite so far as to excite an irritation in a part, invitatory of an afflux of blood,—and the congestion thus created, is usually the immediate precursor to the effusion, and, perhaps, may be deemed its proximate cause. But effusion not happening, phlogosis is apt to be set up, and then, a hæmorrhage may ensue, as one of the incidents to the inflammatory process.

Essentially in the same mode, do some of the less active hæmorrhages take place. Local congestion or inflammation, and occasionally too, of considerable intensity, may here exist, with general debility—while in other, and more frequent instances, without either of these states being appreciable, great laxity of system is displayed,—the case then constituting the atonic hæmorrhage of the old writers. Considering those periodical effusions of blood, which, from long habit, seem to become of the nature of a natural discharge, as a hæmorrhage, they are to be embraced in the same view, since, evidently, irritation and fulness are antecedents to the effusion, very analogous to what happens in menstruation.

Of the active forms of this affection, in its several gradations, such is the rationale. Existing, however, under the opposite circumstances, of extreme depression of the vital forces, the emission of blood is usually without either of the pre-existing conditions mentioned, flowing out, as it were, by a mere leakage of the exhalents, or congestion ever happening, it is *hypostatic*, proceeding merely from gravitation of blood into the more depending parts of the body, neither of which can hardly be considered as operations of life.

Genuine or vital hæmorrhage, it is now admitted, takes place by anastamosis. No recent writer of any authority adheres to the ancient notion of the rupture of vessels, though it is true, that there are some who still credit the conjecture of the transudation of the blood. But this latter hypothesis receives, at present, no general coun-

tenance, and the doctrine of exhalation may be deemed amply entertained. This view, which was originally suggested by Morgagni, is very ably vindicated by the celebrated Bichat, whose arguments I shall cite from his work.*

He observes,—1st. "That in no instance, where he has opened the bodies of those who have died of vital hæmorrhage, has he discovered any traces of rupture of vessels, though he employed the nicest care in washing and macerating the surfaces, and examining them with a microscope.†

2d. "That in squeezing the mucous surface of the uterus, in women who have died in hæmorrhage, a number of small drops of blood may be pressed out, which manifestly correspond to the extremities of the exhalent vessels.

3d. "That hæmorrhages sometimes take place from surfaces, as the skin, where the blood indubitably comes from the exhalents, and which renders it probable that the same is the case with the mucous membranes.

4th. "That if rupture always preceded hæmorrhage, the internal surface of the womb would be a mere collection of cicatrices, as we must suppose one or more ruptures to occur at every monthly period of the catamenia.

5th. "That if in active hæmorrhages, where there is evidently a previous congestion of blood, we should admit the possibility of a rupture, how can we suppose it to take place in passive hæmorrhage, where the powers of the vessels, almost destroyed by disease, permit the blood to pass freely from their orifices.

6th. "That it is difficult to reconcile many of the phenomena of hæmorrhage, such as the extreme rapidity with which it is sometimes produced,—its appearance in another part, when it has disappeared from that in which it previously existed, and its subjection to the influence of sympathy,—with the supposition that it is produced by rupture.

7th. "The irregularity of the appearance of the blood in some hæmorrhages,—its copious flow in one instant, and its complete cessation the next, and so alternately, many times, in the course of a short period,—are difficult to be accounted for on the principle of rupture, for we must suppose the wound to be opened and closed again at every alternation of the discharge.

8th. "Comparing hæmorrhages allowedly proceeding from rupture, with others, they do not resemble them either in their phenomena or duration—they are independent of all influence from sympathy and the passions, which have considerable effect on the common kinds."

[To be continued.]

Cases of Preternatural Labour. *Reported by* William Harris, M. D.

Case First.

A few weeks since, I was called to consult with a medical friend, in a case of preternatural labour. The patient was about thirty years of age, in robust health, and the mother of several children. She had been about twelve hours in the first stage of her labour, and it was now about fourteen hours since the second stage had commenced. She was not, however, exhausted; her spirits were good, and her pains powerfully expulsive. Upon examination, I found a hand outside of the vulva, two feet just within the orifice of the vagina, one a little in advance of the other, and a head engaged in the superior strait.

My first effort was to ascertain whether the head and feet belonged to the same child, or to different children. The head presented in the second position, the hand was a left hand, and the feet were in the fifth position. The relative positions of the different presenting parts led me to think that they all might belong to the same child, but I determined to investigate the case further. I attempted to disengage the head, and push it up into the right iliac fossa, but the membranes having been ruptured several hours, the liquor amnii all drained off, and the expulsive efforts powerful, the attempt was unsuccessful. I next endeavoured to satisfy myself by passing my hand up the legs, as far as the breach; but this effort was also impracticable.

What, under existing circumstances, was to be done? If there were two children, and traction efforts were made upon the legs now in the vagina, the head of the first child would be likely to lock upon the head of the second, now engaged in the superior strait. It was decided that the safer course was to bring down the head, and a difficulty here arose as to whether the child was dead or alive. If dead, it would be much easier to act upon the head, in its present situation, with the crotchet; but if alive, the forceps must be tried. The hand without the vulva was cold and pulseless, and the beating of the fœtal heart could not be heard; but, as the signs of fœtal death cannot be fully relied upon, I decided to try the forceps, and, accordingly, applied them without much difficulty. The head was now brought down, the feet descending before it, and the shins in contact with the face. The delivery was accomplished after a few minutes, and there proved to be but one child, which was dead; and, judging from the discolouration, had been so for several hours. The patient recovered from her accouchement very rapidly.

Case Second.

In the course of last year I attended a lady in her accouchement, who had had several still-born children in succession, in consequence of malpresentations. She and her friends were, of course, exceedingly anxious that, on this occasion, she should be favoured with a living child. Under these circumstances, the reader may judge what were my feelings, when, upon examination, I discovered that the membranes were ruptured, and a large gelatinous umbilical cord presented, the fold of which was just within the vulva, and

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* Anatomie Generale.

† By Marendel, a late writer of high authority, who has, with infinite care, made similar examinations to a great extent, this statement is fully confirmed, and such seems now to be admitted as a demonstrated fact.

had been evidently carried down by the gush of waters. Just above the superior strait, not yet engaged, was the breech, in the first position, with the heels in contact with the nates. The pulsation in the cord was strong, and the breech in a favourable position, as I hoped, for a successful manœuvre. I accordingly placed the funis between the second and index fingers of the left hand, carried it up in front of the child, above its knees, and lodged it safely between them and its abdomen. I, then, in withdrawing the hand, carefully seized the feet, the toes in the palm of the hand, and forefinger between the ankles, and, by a sudden traction effort, brought down the legs and thighs—the breech, now, plugging up the superior strait, and leaving the funis above. My anxiety induced me to proceed with a rapid and forcible delivery. My efforts were crowned with complete success, and I had the high gratification of presenting to a delighted mother a living child. Not more than ten minutes elapsed between the commencement of this manœuvre and the birth of the child. The mother recovered without an untoward symptom.

Case Third.

I was called, a few years since, to consult with a distinguished physician, in a very rare and interesting case of preternatural labour. The subject of these remarks was upwards of forty years of age, in good health, and pregnant with her first child.

The first stage of her labour was about ten hours. The second stage had continued twelve hours when I arrived. The patient was strong, by no means desponding, and her expulsive pains violent. Upon examination, I found the two hands of the fœtus outside the vulva, the thorax firmly engaged in the superior strait, the head turned backwards, with the vertex in contact with the back, and the chin resting upon the top of the symphysis pubis. I decided, at first, to attempt version by the feet; but the waters had been so long lost, and the expulsive efforts so violent, that this was utterly impracticable. As the fœtal heart had ceased to pulsate, and as the presenting hands were cold, pulseless, and discoloured, I recommended that the child be mutilated, and proposed its decapitation, to which the attending physician and mother readily assented. I had, at the time, in my pocket, a pruning knife, with a long handle, and a short, strong blade. I passed the blade carefully behind the neck, placed my thumb in front of it, and thus, safely to the mother, decapitated the child. I then took hold of the hands, and, without difficulty, delivered the body, and, afterwards, by introducing my forefinger into the mouth, the head was promptly brought down. The child appeared to have been dead several days; the practice was, therefore, clearly judicious,—and, if it had been alive, I doubt very much whether any other course, at that late period, would have succeeded. The mother recovered, enjoyed afterwards good health, and never had another child.

Case of Preternatural Labour. By William Denny, M.D.

I was requested to visit Mrs. F——, November 11th, 1833, in labour, who was represented to have given birth to one infant of a twin pregnancy. The midwife said that the second fœtus was in malposition, its hand presenting. The uterine efforts were powerful, and occurred with very short intervals of ease. Upon examining with the two first fingers, I found the vagina relaxed, and reached an extremity of the fœtus so high up, and receding so easily on my touch, and yet not advancing by the pains, as to be unable to say whether it was a superior or inferior one. I thought, however, that it was the latter. The liquor amnii of the second ovum had been discharged. With ease, and cautiously, I introduced my hand into the vagina, and made out the presentation as follows, viz.:

Left foot of fœtus, occupying an oblique diameter of the pelvis; heel to left sacro-iliac synchondrosis. Between the fibular edge of that foot, and the pubis of the mother, was the left hand; its dorsum, anterior; thumb, to right extremity of the oblique diameter. Head resting against right acetabulum; os frontis, downward; face directed backward, and to left side of pelvis. When the womb contracted, the presenting parts became wedged in the brim, so as to cause a complete impediment to the progress of the case.

The slightest disturbance by traction at the foot, brought on the action of the uterus; and with it, the wedging of the parts presenting. I adopted the following manœuvre: I passed the fore and middle fingers between the pubis and the foot, and over its dorsum; with the third and fourth above the heel, and against the tendo-achillis, but without disturbing the position even of the *foot* of the fœtus; I lodged the end of my thumb against such point of the head as I found would poise it equally; then pushed slightly but suddenly, so as to cause the head to recede a little, and grasping the foot, so as to make traction on it a continuous motion with the impulse communicated to the head; and changed the position of the fœtus, before the uterine efforts should come on in consequence, and converted that position into a footling case. The manœuvre was successful, and the case terminated well, both for mother and twins.

Maygrier gives some directions for such a case of entanglement, in the "Use of the Repoussoir and Fillet," but the work was not at that time in my possession.

Ellicott's Mills, Dec. 30, 1838.

Philadelphia Medical Society.—At the Annual Election for Officers of the Philadelphia Medical Society, held January 2d, 1839, Dr. Thomas Harris was elected President; Drs. S. Jackson, and R. Coates, Vice Presidents; Dr. Bond, Treasurer and Orator; Drs. B. H. Coates, Warrington, and White, Secretaries; Dr. Johnston, Librarian; Drs. Brewer, Kirkbride, I. Parrish, West, and Patterson, Curators.

REPORT OF CASES TREATED IN THE PHILADELPHIA DISPENSARY,

For November, 1838.

[*To be Continued Monthly.*]

The Physicians to the Dispensary are:—

Drs. H. S. Patterson, N. E. District,
C. N. Berkeley, N. W. "
W. L. Knight, S. E. "
Drs. E. C. Evans, S. W. District.
C. R. Boyer, N. Middle "
E. G. Davis, S. Middle "

CASE.	Total.	Cured.	Dead.	Country. F.	Country. N.	Infant. M.	Infant. F.	Between the ages of 1 M.	1 5 F.	5 15 M.	5 15 F.	15 25 M.	15 25 F.	25 45 M.	25 45 F.	45 — M	45 — F.	In what District occurring. N. E.	N. W.	S. E.	S. W.	N. M.	S. M.
Abscess,	1	1	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0
Amenorrhœa,	1	1	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0
Anasarca,	4	4	0	1	3	0	0	0	0	0	0	0	0	2	0	1	1	2	0	1	0	0	1
Bronchitis,	3	2	1	3	0	0	0	1	0	0	0	0	2	0	0	0	0	0	0	2	1	0	0
Burns,	1	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
Catarrh,	2	2	0	0	2	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	0	0	1
Colic,	1	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Contusion,	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0
Costiveness,	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0
Cynanche Parotidea,	2	2	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
do. Tonsilaris,	2	2	0	0	2	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2
Delirium Tremens,	1	1	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0
Dentition,	1	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
Diarrhœa,	4	4	0	0	4	0	2	0	1	0	0	0	1	0	0	0	0	1	0	1	0	1	1
Disease of Heart,	2	1	1	1	1	0	0	0	0	0	0	0	0	0	1	1	0	0	1	0	1	0	0
Erysipelas,	1	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
Fever, Bilious,	2	2	0	0	2	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1	0	1	0
——, Intermittent,	1	1	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0
——, Remittent,	8	8	0	1	7	0	2	0	0	0	0	1	1	1	0	0	1	1	3	1	0	3	0
Fracture of Radius,	1	1	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0
Gastritis,	2	2	0	2	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	1	0	0	0
Hemicrania,	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
Hooping Cough,	1	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
Hysteria,	1	1	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0
Leucorrhœa,	1	1	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
Measles,	2	2	0	0	2	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0
Neuralgia,	3	3	0	1	2	0	0	0	0	0	1	0	2	0	0	0	0	1	0	2	0	0	0
Ophthalmia,	6	6	0	1	5	0	0	1	4	0	1	0	0	0	0	0	0	3	0	2	0	0	1
Palpitation,	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0
Phthisis,	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0
Pleuritis,	4	4	0	3	1	0	0	0	0	0	0	0	0	4	0	0	0	3	0	1	0	0	0
Pleuropneumonia,	1	0	1	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
Pneumonia,	2	1	1	0	2	1	0	0	0	0	1	0	0	0	0	0	0	1	0	1	0	0	0
Porrigo,	2	2	0	0	2	0	0	0	1	0	1	0	0	0	0	0	0	1	0	0	0	0	1
Rheumatism,	4	4	0	3	1	0	0	0	0	0	0	0	1	0	0	0	3	0	1	2	0	0	1
Scarlatina,	1	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
Scrofula,	1	1	0	0	1	0	0	0	0	0	0	0	1	0	0	5	0	1	0	0	0	0	0
Sprain,	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0
Ulcers,	3	3	0	1	2	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	2	0	1
Varicella,	1	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Vomiting,	2	2	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0
Wounds,	2	2	0	1	1	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	2
Zona.	1	1	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0
	84	79	5	24	60	6	8	7	11	1	6	2	11	10	6	2	14	22	6	27	5	9	15

BIBLIOGRAPHICAL NOTICES.

Jefferson Medical College. Professor PATTISON'S *Introductory Lecture. Session* 1838–9. Philadelphia: published by order of the Committee. 1838. pp. 19.

AFTER a brief history of the progress of the Jefferson School, from its institution as a branch of a distant College, to its present condition with an independent charter, Prof. Pattison offers to the "consideration and example" of the medical student, sketches of the characters of two of the most distinguished lights of surgical science—Hunter and Physick. As a specimen of style and successful portraiture, we extract a descrption of the personal appearance of the American surgeon:

"The person of Dr. Physick was strongly indicative of his character. No man who was ever in his company could ever again forget his presence. His figure was rather under than over the common height; it was slight, but, on the whole, graceful. It was, however, on the 'temple of the soul,' in his noble head, where the strong delineation of his character was portrayed by Nature's chisel. His broad, expanded forehead, his aquiline nose, his compressed lips, and his round Grecian formed chin, appeared, from the pallid hue of his countenance, sculped in cold Parian marble; but the eye, full of thought, pensive, mild, and penetrating, shed the influences of life, energy, and feeling, over a countenance otherwise deathlike. For many years himself the victim of disease and suffering, and, from the nature of his pursuits, brought into hourly association in the chambers of death with scenes the most heart-rending to which our nature is subject, the subduing influences of melancholy had a saddening effect on the expression of his countenance and the tone of his character. But, although little given to cheerfulness, there was nothing of misanthropy or severity in his disposition. On the contrary, it was full of gentleness and tenderness. A sufferer himself, he sympathized most deeply, most sincerely, with the sufferer, and devoted his whole life and the whole energies of his mind to the mitigation of the pains and miseries of mortality."

I.—*Some Account of the Typhus Exanthematicus, as observed in St. Bartholomew's Hospital, London, in* 1837–38. By CHARLES WEST, M. D., Graduate in Medicine and Surgery in the University of Berlin.

II.—*A Statistical Inquiry on Fever, being an attempt to ascertain the Prevalence, Susceptibility, Intensity, and Prognosis, with some Observations on the Influence of Medical Treatment.* By AUTHUR SAUNDERS THOMSON, M. D., &c.

IN the Edinburgh Medical and Surgical Journal, for July, 1838, we find two interesting articles on Typhus Fever. The paper by Dr. West is an account of the symptoms, pathology, and treatment of the disease as it appeared in the last epidemic at London; that of Dr. Thomson is a statistical statement of the results obtained from comparing the practice of various hospitals in Great Britain and Ireland. Of course, the two papers present totally distinct points of interest. That of Dr. West should be first examined, as our first object in all such cases is to identify the disease before we proceed to inquire into its rate of mortality and relative frequency of appearance.

First, of the appearances found after death by Dr. West. These were obtained from the dissection of ten bodies—a small number to yield accurate results, more especially as the appearances on dissection are not related in a very careful manner.

It appears that in no case was there much morbid alteration of the glands of Peyer; in one only they "appeared enlarged." In other cases there was no morbid appearance whatever in the alimentary canal. In five cases there were increased vascularity and softening of the whole, or of a portion of the intestinal canal or stomach. The liver was always healthy, but the spleen was enlarged and softened in six cases.

We may, therefore, conclude that, as far as the abdominal organs are concerned, the disease was typhus, and not typhoid fever, which latter term we use as synonymous with dothinenteritis.

The appearances of the brain were various. In nine cases the membranes were more or less congested. There was serous effusion into the arachnoid in six cases; once there was some softening of the cerebellum, and of the left anterior lobe of tbe cerebrum.

"The respiratory organs were only once found in a healthy condition, and that one case we can scarcely reckon with the others, it being that of the patient who died on the forty-third day." These lesions were chiefly extreme congestion of the bronchial mucous membrane, extending in many cases to the lower lobes of the lung. The heart, it is said, presented no peculiar morbid appearance, and the state of the blood is not mentioned.

From this review of the pathological phenomena of the fever described by Dr. West, we may conclude that it is identical in its anatomical lesions with the epidemic of typhus which occurred in Philadelphia in the years 1836 and 1837, and ceased in the early part of 1838. This

epidemic was chiefly local, and confined to a portion of the town. It was described by Dr. Gerhard, in two papers published in the American Journal of Medical Sciences, (February and August, 1837.)

The symptoms related by Dr. West are equally conclusive, that the disease was the same. The action of the bowels was not disturbed in the great majority of cases; diarrhœa occurred only in one-sixth, nor did it last longer than forty-eight or sixty hours, in more than four patients. The evacuations were watery and yellow. There was pain of the abdomen in thirty cases, but in nine only was it severe. The bowels were constipated in thirteen cases, and there was tympanitic distension of the abdomen in eleven.

The state of the tongue was variable, it became dry and fuliginous when the brain was much affected. This observation is usually made in this variety of fever.

The nervous symptoms are far more important than those connected with the digestive canal. Pain in the head was always found when the patients were admitted before the occurrence of stupor or delirium. It came on at the beginning of the disease, either before or closely after the first shivering; it could not be discovered when there was either delirium or stupor, and was, therefore, most frequent in the first eight or ten days. There was more or less delirium in thirty-three cases, including all those which were fatal; it lasted on the average seven days, and was extremely various in its character,—and, in the slighter cases, was observed only during the night. It is stated that tremor or subsultus was frequent; very probably it was always present. The strength was extremely prostrated, even in the stoutest individuals, and the symptoms of disordered hearing and sight were very frequent. The suffusion of the eye, which is so characteristic of this disease, was most marked at the commencement; the eye became dull and vacant on the approach of death. There was some affection of the respiratory organs in twenty-one cases. A crepitant rhonchus was heard in the lungs of ten patients, four of whom died; in the others the signs were chiefly those of bronchitis.

The affections of the circulatory organs are very imperfectly described by Dr. West; the pulse was on the average one hundred and twenty. The undulatory character of the pulse, which is so frequent in these forms of fever, was commonly met with.

The symptoms afforded by the surface of the body are much morecar efully noted. Forty-two cases presented the peculiar measle-like eruption described by so many authors, "which first showed itself from the sixth to the eighth day." "Of the eighteen cases in which no eruption was observed, five only were admitted before the eighth day of the disease; it is, therefore, very probable that the eruption had existed in some of these patients, but had disappeared before their admission." These spots would fade within two or three days, but would not entirely disappear for a long time afterwards, often for a fortnight.

The appearance of this eruption was identical with that of the fever observed at Philadelphia, a few years since, while it is totally unlike the rose coloured spots of typhoid fever, which are almost entirely confined to the abdomen, and are much less numerous than the measle-like eruption of the typhus. The eruption would sometimes become dark, and resemble the ordinary petechiæ, which was also a matter of common remark at Philadelphia.

Amongst the other symptoms of the exterior, Dr. West particularly notices the burning pungent heat of the surface, which left a disagreeable sensation upon the fingers for some time after the hand was removed from the body. He does not mention whether the exhalation from the skin was characterized by the disagreeable pungent odour which was so frequently observed in the epidemic at Philadelphia.

The mortality was one in four, two-sevenths, showing that the epidemic was extremely severe. The mortality varies so much in the epidemics of typhus, that practitioners who are not aware of the circumstance would be led into egregious errors. The mortality at the hospital, when the greatest number of cases occurred at Philadelphia, was enormous—about one in three cases, that is, including a very large proportion who died immediately after admission: these patients, for the most part, had received no medical aid whatever previously to their admission, and entered very late in the disease. They were to be found amongst the most miserable classes of the population. At the very same hospital, another epidemic, which was chiefly confined to passengers arrived in the emigrant ships from Europe, offered a very small ratio of mortality, scarcely three or four per cent.

In proportion as the mortality of an epidemic of typhus is great, the contagion is more active. Thus, in the epidemic at St. Bartholomew's hos-

pital, Dr. West states that "eleven gentlemen, who were in the habit of frequenting the hospital, have been attacked by the fever, to which nine had fallen victims. Sixteen nurses, and twenty-one patients admitted for other affections, have likewise suffered from the disease, which terminated fatally in ten instances; and I do not doubt, but that many similar cases occurred which did not come under my notice." The epidemic of 1836–7, at Philadelphia, offered the contagious form of the disease in a very high degree; and here, as well as at London, the fever seemed most severe and most contagious during the coldest months of the year.

The treatment is not stated with sufficient detail, nor is it analysed with sufficient care, to enable us to draw any very accurate conclusions from it. The disease was never cut short after chill had occurred,—that is, after it had fairly set in. The observations made in this city, as well as in all other places, confirm the statement of Dr. West. Nevertheless, much may always be done; and the disease may be so far mitigated, as to prevent the developement of local and secondary affections.

Such of our readers as are familiar with the subject of typhus fever, will regard with much interest the analysis which we have just given of Dr. West's paper. The very decided distinction between the typhus of Great Britain and Ireland, and the typhoid fever which is described by the late French writers, is not even yet understood by many practitioners. Hence, in reading the works of Louis and Chomel on the one hand, and of the British physicians on the other, we must not forget that we are studying two diseases which differ from each other in many important respects. Our present object is not to draw a parallel between them, but simply to present such an analysis of Dr. West's paper as will show what the disease is. We may afterwards return to this subject, and will give a more connected account of the two diseases.

The paper of Dr. Thomson contains numerous statistical facts relative to fever,—that is, to the typhus of Great Britain—the typhoid being there of much more rare occurrence. We shall extract from it in the next number the most interesting data.

Sidney A. Doane, M. D., has been elected Professor of Physiology in the University of New York.

CLINICAL LECTURES.

PENNSYLVANIA HOSPITAL.

EXTIRPATION OF THE PAROTID GLAND.

Wednesday, 19th December.—Dr. Randolph entered the amphitheatre, and commenced as follows:—

Gentlemen,—We propose to perform an operation to-day, for the removal of a tumour, which we believe to involve the parotid gland. Inasmuch as this operation must necessarily be a tedious one, and consume a good deal of time, I shall detain you but for a few moments, in order to give you an account of the case. I have said to you, gentlemen, that we *believe* this tumour to involve the substance of the parotid gland. Upon this point, however, we do not give a positive opinion, because it sometimes happens that tumours form in the substance of the parotid gland, in consequence of an enlargement of a lymphatic gland, and attain some size, and yet admit of removal, leaving behind the parotid itself. At other times, a tumour may form exterior to the parotid, and attain a large size, and, by its compression upon the parotid, cause its partial absorption, so as to seem to occupy its precise situation. Judging from the feel and external appearance of this morbid growth, I am of opinion that it involves the parotid gland; still, for the reasons I have just given, we cannot decide this point positively, until after the operation.

The patient is a coloured man, about fifty years of age, an inhabitant of the southern part of the state of Delaware. The history which he gives of his case, is this:—He first perceived, about twelve months ago, a small tumour of the size of a marble, just anterior to the lobe of the left ear. The tumour at that time was moveable, and did not give him much pain; it continued to increase in size, and some months after he first noticed it, he showed it to a highly respectable medical gentleman, living in his neighbourhood, who advised its removal. The operation, however, was not performed, and the tumour has gone on increasing gradually in size up to the present time. He came to this city, and, through the politeness of Dr. Beasly, was placed under my charge. Since his admission into the hospital, ten days ago, the tumour has sensibly increased, according to the observation of Dr. Smith, myself, and other persons connected with the institution, and is now about the size of an orange. Now, as far the operation is concerned, I would much prefer that the tumour had been stationary for some time, because, in that case, I might infer that the hardness and weight of the tumour would, by its compression, have obliterated some of the vessels supplying it with blood, so as to diminish the hæmorrhage attending its removal. Inasmuch, however, as the tumour is still enlarging, it is probable that its blood-vessels are increased in size, so as to furnish it with a supply of blood adequate to its growth, and we may expect to find it in a highly vascular condition.

You are aware, gentlemen, that doubts have been expressed, whether the parotid gland has ever been completely and successfully extirpated from the living subject. The limits of my time will not permit me to enter into a prolonged argument upon this subject; but I must content myself with the simple statement, that to deny the fact of the extirpation of the parotid gland, is, in my opinion, to deny the testimony of some of the most respectable and distinguished authorities in anatomy and surgery. We have accounts of the extirpation of the parotid gland, which may be dated at least as far back as a century ago. Heister relates a case in which a diseased parotid gland was extirpated in the year 1733. Subsequently, several cases are reported by the older surgeons, in which the operation had been performed. I may mention the names of Siebold, Sourcrampe, Scultetus, Gooch, and Behr, all of whom have reported cases. Mr. Bell, in his "Essay on Tumours," states that he removed the parotid gland. More recently, Mr. Abernethy, in the seventh volume of the Medico-Chirurgical Transactions, relates a case in which Mr. Goodland, of Bury, removed the whole of the parotid gland, in September, 1815. In 1818, it was successfully removed by Mr. Carmichael, a surgeon of Dublin. A case is reported in 1824, in which Beclard, the late distinguished Professor of Anatomy in the "Ecole de Médicine," at Paris, asserts that the parotid gland was entirely removed: this patient died on the 15th day after the operation, from erysipelatous inflammation, and, upon dissection, it was satisfactorily proved that every particle of the gland was removed. Besides these cases, the operation has been performed in Europe by Gensoul of Lyons, Lisfranc of Paris, Sir Astley Cooper, and some others.

The diseased parotid gland was first successfully extirpated in this country by Professor George M'Clellan, of this city, in 1826:* since that time, he has twice removed it. The operation has also been performed by Professor Mott, and the late Dr. Bushe, of New York, by the late Professors Davidge and Smith, of Baltimore, and by Professors Dudley and N. R. Smith, of Lexington, Kentucky.

In the London Medical Gazette, for June last, a case is communicated by Sir James M'Grigor, in which Mr. Widmer, surgeon to the British forces at Toronto, Upper Canada, successfully extirpated this gland. Now, gentlemen, admitting that in some of these cases mistakes have been made, and that tumours resembling the parotid have been taken out, and not the gland itself, still, this objection cannot surely apply to *all* the cases; for we cannot suppose that the most learned and distinguished anatomists and surgeons in the world would be so ignorant as not to know the parotid gland when they saw it removed from its natural situation, and the place which it ought to occupy left empty and void.

I have been in the habit of stating in my lectures, for a number of years, that I believe in many instances a diseased parotid gland could be more easily removed than the natural one, for this reason: parts, in a state of tumefaction and scirrhous enlargement, frequently, by their compression, produce a partial absorption of the adjacent tissues; besides which, one of the characteristics of scirrhus, is to contract itself, so that the tumour isolates itself, in a measure, from its former connexions. I was led to this belief, by noticing the facility and quickness, with which I have been able, in some instances, to extirpate a scirrhous mammary gland, which, in its natural condition, would necessarily occupy a good deal of time, and be attended with some difficulty. In two or three instances, in performing this operation, after the first incisions, I have been able to raise up the diseased gland, and, with a very few strokes of the scalpel, separate it from its loose cellular connexions. In the report of the operation for the removal of the parotid gland, by Dr. N. R. Smith, I see that he expresses nearly the same sentiments.

I will now briefly state the manner in which I propose performing the operation. I shall make an incision commencing at the zygoma, and continue it down over the surface of the tumour, until it reaches the edge of the sterno-mastoid muscle,—and then a second incision, intersecting this at right angles. I shall next raise up the flaps, and dissect up the tumour from below. My object in doing this, is to cut down for the external carotid artery, and endeavour to take it up just before it enters the gland, in the space between the edge of the stylo-hyoid muscle and the angle of the lower jaw. It is possible, however, as the tumour extends so low down, that it may be necessary to take up the common trunk of the carotid. In removing the tumour from its bed, between the mastoid process and the angle of the jaw, I shall use, as much as possible, the handle of the scalpel.

[Dr. RANDOLPH then proceeded to operate, in the presence of Drs. Coates, T. Harris, J. Rhea Barton, Norris, and Horner, besides several other highly respectable physicians and surgeons, and an unusually numerous class of students.

The patient was placed upon a table, his head inclined to the right side, and an incision made from just above the zygoma downward and forward over the whole extent of the tumour, to the edge of the sterno-mastoid muscle. A second incision was then made, which intersected this at right angles. Upon dissecting up the flaps, and raising the lower edge of the tumour, the facial artery was exposed, and it was judged advisable to secure it with a ligature. The adhesions were found to be so strong and close, that it was necessary to dissect the whole mass from its situation with the edge of the knife, as no separation could be effected with the handle of the scalpel. The tumour adhered so very firmly at its lower part to the angle of the jaw, and projected so far beyond it, that it was found impracticable to secure the external carotid artery at the place contemplated, and it was thought that the

* It is stated in Cooper's Surgical Dictionary, (American edition,) by Dr. Reese, the editor, that the parotid gland was extirpated by Dr. White, of Hudson, in 1808.—*Eds.*

diseased mass could be more readily removed by separating it above, and then drawing it out. The dissection was accordingly continued from above downward, and, in doing this, it became necessary to secure the temporal and internal maxillary arteries, besides several others of smaller size, which bled with great freedom. The external jugular vein was also cut, and secured at both ends. In dividing the last bands which confined the tumour to its situation, the external carotid artery was cut, and poured out a large stream of blood; it was immediately secured with a ligature thrown round the artery by means of Dr. Physick's needle and forceps. A portion of the masseter muscle was so firmly attached to the diseased mass, as to render the removal of it necessary. The periosteum, also, covering a portion of the angle of the lower jaw, was absorbed, and the tumour adhered to the bone itself. The whole gland was finally separated quite unbroken, and, when removed, the bare styloid process and the stylo-maxillary ligament were distinctly seen.

In consequence of the division of the portio dura, the operation was necessarily followed by paralysis of the muscles on that side of the face. It should be stated, however, that paralysis existed previous to the operation; and it is somewhat singular that it was not augmented by the division of the nerve.

The wound was closed by a few stitches of the interrupted suture, and a light dressing applied. The operation lasted fifty-nine minutes.

Upon a careful examination of the parts, after the operation, it was unanimously declared by the surgeons and anatomists present, that *the whole of the parotid gland was completely removed.*]

Case continued.—Evening. Patient complained but little; slight oozing from the wound; no fever; pulse good. Ordered gum water, sago, and fifty drops of laudanum.

20*th.* Has slept well; little pain; pulse eighty-four, full, and regular. Diet continued; an enema. *Evening.* Pulse full, slightly accelerated; no headache, or other bad symptom. Ten grains of Dover's powder.

21*st.* Has slept well; slight cough, which is in some degree kept up by the tightness of the bandage on the throat. Bowels opened by an injection this morning; pulse regular, eighty-four; tongue moist, slightly furred. Expression of countenance and spirits good. Ordered the soft parts of six stewed oysters; milk at night; soda biscuits.

23*d.* Wound dressed to-day; suppurating; slight inflammation around the parts. Cough better; pulse natural; tongue moist. Dressings renewed; diet continued.

24*th.* Up to this date, five days after the operation, no bad symptom; to-day, slight erysipelas on face and ear; a little fever; pulse ninety-six, but regular. Wound suppurating. Poultice to wound, and soap liniment rubbed over the side of the face. Bowels opened by injection; Dover's powder.

25*th.* Symptoms good; three sutures removed; treatment continued.

26*th.* Erysipelas disappearing and wound suppurating freely and granulating; swelling of the face disappearing. One small ligature came away.

27*th.* Erysipelas nearly gone; other symptoms favourable; cerate to wound.

29*th.* Still improving. No paralysis except at the angle of the mouth. Two ligatures came away. Mucilage to wound.

31*st.* Wound healed at the corners; elsewhere granulating freely; parts perfectly healthy. A large ligature came away. Sits up in bed.

2*d.* Wound almost healed. General health excellent.

PHILADELPHIA HOSPITAL.

BURNS—STAPHYLOMA—CANCROIDES, ETC.

Saturday, December 22*d.*—Dr. Gibson commenced by exhibiting to the class the several patients upon whom he had at previous meetings operated. The operation for entropium on both eyelids, had been, he stated, attended with success, and the man declared himself materially benefited. The cases of phymosis and paraphymosis were again shown, and appeared all to be doing very well—either entirely relieved, or rapidly progressing to a happy termination. The case of hydrocele, which had been operated on by the seton, was next introduced. This man was also doing well. Slight suppuration had occurred in the track of the seton. This, Dr. G. remarked, was generally the case,—and is not to be looked on as a bad omen, but rather as a good one, for a more certain cure follows. Here is the man, continued Dr. G., from whose neck I removed last Saturday the adipose tumour. The wound is now granulating kindly. He has suffered, however, so much pain in it and the adjacent parts, as not to permit the edges to be drawn together. It is now eight days since the operation. I will examine into the condition of the ligatures; and, on account of the number of vessels which sprang during its excision, there are a good many. You see they all come away readily. I will now draw the lips of the wound fairly together, for it must not be permitted to gape any longer, as its healing would be retarded. This I have now done, and in a short time you will find it healed. The boy whose great-toe I removed last week for incurable deformity, arising from a burn, is doing well; the wound has nearly healed; and he will walk without impediment, though it will yet require some effort to restore the foot to its natural position. This may be done, perhaps, by bandages and splints, or by machinery, or possibly it may be necessary to make a slight cut through the *sound* skin, either above or below the cicatrix of the burn. The next case I shall present to your notice is a very extensive burn, which occurred three weeks since. I have not shown it before, on account of the danger that might have attended the exposure; for if a chill had been induced, the patient's chance of recovery would have been diminished. This is a common accident at this season, and much

more common among females than males, from the circumstance of their clothing being more combustible than men's. Extensive burns, although superficial, are often followed by more serious consequences than severe burns which are more limited.

Every surgical writer follows some method of classification in treating of burns. The one I prefer is that of Pearson. 1st. Superficial burns, producing inflammation of the cutaneous system, terminating, generally, in resolution. 2d. Deep-seated burns, in which the true skin is involved, and ulceration occurs to a greater or less extent; and, 3d, where the vitality and texture of the part is completely destroyed and charred to a cinder. When a burn occurs on the body, a chill generally takes place, followed most frequently by altratic symptoms, such as great oppression, and difficulty of breathing. Now, observe the extent of this burn—the whole side, and greater part of the back are involved. It is now presented to you in a state of ulceration,—the constitutional symptoms have subsided, the immediate danger has passed, and the patient is doing very well. In five or six weeks you will find it nearly skinned over, except minute granulating surfaces, scattered here and there, like little islands. The best treatment in the latter stages of a burn is a stimulating one,—new skin must be produced, and the process of cicatrization hastened. There are several modes of treating recent burns. When the skin is not broken, *raw cotton* is the best. In a case like this cotton would be injurious, inasmuch as its spicula would adhere to the granulations, and produce irritation. Its discovery in the treatment of burns was accidental. A lady of Maryland happened to be carding cotton in an adjoining room, and hearing the cries of her child, who had been severely burnt, wrapped it up in the cotton. The child's sufferings were very soon mitigated, and it speedily recovered. The particulars of the case were published by Dr. Dallam, and from that period cotton has been held in high esteem in the treatment of superficial burns. In the third, or carbunculous variety of burn, stimulating applications are the most appropriate,—and of these the turpentines are the best. In the first variety of burn, where the cuticle is elevated, the vesicles should be punctured. Some persons I have known in such cases peel it off; this ought not to be done; it exposes the true skin, and does mischief. In these cases the linseed oil and lime water is the best topical application; but the applications during the progress of the cure, require to be frequently changed.

Secondary affections, of a very troublesome character, frequently follow burns, such as contractions and adhesions. I here show you what was once a very extensive burn, not so large, indeed, as the one you have just seen, but still much larger than from the present appearance you would be likely to suppose. It is ten months since it happened, and it is not healed entirely yet; and some time will elapse before cicatrization is perfect. The arm, you observe, cannot be elevated, but is bound down to the side by the adhesion of the skin to the pectoral muscle. By the time the sore is healed, it will be completely pinned down. Similar cases are constantly occurring, from the carelessness or ignorance of practitioners. The eye, neck, hands, or feet, are generally the sufferers. The plan recommended by Mr. Henry Earle, is to remove the entire cicatrix. This is not always practicable, as in the present case, where it is so extensive. I might perform an operation for the relief of this man, by dividing the cicatrix; but, from its great extent, I am inclined to believe that no permanent benefit would result, inasmuch as there would be strong tendency to subsequent contraction. As the patient is anxious to be relieved, I may, at a future period, cut through about one third of the pectoral muscle, trusting to the remaining portion having sufficient power left to answer its original purpose.

This man I next show is suffering from a very serious affection of the eyeball, called *staphyloma*, from its resemblance to a grape, or bunch of grapes,—for sometimes there is one tumour, at other times more. In this disease, the transparency of the cornea becomes destroyed, and it projects in a conical form beyond the lids as a pearl-coloured tumour, sometimes smooth, sometimes irregular. From the exposure of the eyeball from the protuberance, it is continually catching extraneous bodies, which produce a vast deal of irritation. This man, during the excessive heat of last summer, after working all day in the harvest field, took a cold bath, while heated, in the Schuylkill. Violent inflammation of the eye resulted, and finally this caused the condition of the staphyloma. No topical application that we can make will restore the transparency of the cornea, and enable him to regain the sight which is lost. The only thing left for us to do, is to relieve the man, and improve the appearance of the eye, by an operation. This he himself is anxious for, as he thinks the other eye is becoming affected. This apprehension may be well grounded. I shall pass the cataract knife through the cornea, and make a section of it; I shall then lay hold of the flap with the forceps, and remove it. The crystalline lens and vitreous humour will be evacuated, and the eye will collapse. Were I simply to puncture the tumour, the wound would soon close up, and the same condition would speedily recur. [Dr. G. operated, and with the effect just stated.]

Here is a case which, from its appearance, you would probably pronounce to be the cicatrix of a burn, and, indeed, it bears a very strong resemblance to one. It is, however, a disease called *cancroides*, first accurately described by Alibert in his valuable work on the diseases of the skin. In this country it is rarely met with, although I have seen it several times, and always among the negroes. I have seen it hanging from the lobe of the ear like a prickly pear, and in these cases the patients had all been in the habit of wearing brass ear-rings, and to that circumstance attributed the disease. Some years ago I removed a

tumour of this kind from the neck and ear of a man in this hospital; a severe chill followed the operation, succeeded by fever and high cerebral excitement, and death. On examination, the membranes of the brain were found extensively inflamed. It is true that the man was of bad constitution and of intemperate habits, but still there are strong reasons for believing that the operation produced more irritation than under similar circumstances could have been anticipated, and probably was the immediate cause of death. Alibert inclines to the opinion that it is a constitutional, and not a local affection, and that it will return after an operation. I have removed tumours of this description six or seven times; some I have found to return, and others not. Since, however, the particular case I have spoken of, I have been afraid to meddle with them. As this is productive of great inconvenience to the patient, by distorting and closing the right eyelids and contracting the muscles of the face, I will give her case further consideration, and endeavour to think of some means of affording her relief.

CLINICAL REPORTS.

PENNSYLVANIA HOSPITAL.

List of Cases treated in the Surgical Wards of the Pennsylvania Hospital, and discharged between December 12th and December 31st, 1838. Dr. T. Harris, Attending Surgeon.

[Reported by H. H. Smith, M. D., Resident Surgeon.]

A case of contusion of the left side of the chest, and of the thigh, hand, and leg of the same side, caused by a fall from a scaffold, was admitted November 28th; treated by cups to the chest, frictions to the other parts, and perfect rest: discharged December 15th, seventeen days after admission. A slight pleurisy followed the blow on the chest, but was relieved in a short time by free depletion and small doses of antimony.

A case of concussion of the brain, caused by a fall through a hatchway, from the fourth story of a warehouse, was admitted November 26th. The man was insensible at the time of his admission; extremities cold, and pulse slow and feeble. Sinapisms were placed over the stomach, upon the extremities; the head shaved, and cold applied to it. In the course of six hours the pulse rose, when the man was bled sixteen ounces, and afterwards purged. After the reaction from the first bleeding, he was cupped to the back of the head, and on the third day he was entirely conscious. Discharged cured, December 15th, nineteen days after the accident.

A case of fracture of the sixth, seventh, and eighth ribs, with a contusion of the knee joint, caused by a fall, was admitted October 27th. A tight roller was applied around the chest, the limb was placed at rest in a long fracture box, and freely leeched. Pleurisy followed the injury to the chest; was treated accordingly, and the man discharged December 19th, fifty-four days after the accident. In this case, the injury to the knee proved more serious than that to the chest. Violent inflammation came on, about three days after the man's entrance, which was overcome only by repeated leechings, fomentations, and perfect rest.

A case of contusion of the back of the hand, caused by the falling of a weight on it, was admitted October 17th. A slight wound existed, which was drawn together by adhesive strips. The arm and hand were then loosely bandaged on a splint, and leadwater constantly applied. Erysipelas, however, attacked it, and the whole back, and a portion of the palm sloughed. This was treated by poultices, and gentle motion every second or third day, until cicatrization was complete, by which any permanent contraction of the fingers, or stiffness of the wrist, was prevented; and the patient was discharged with a perfect hand, December 19th, sixty-three days after the accident.

A case of fracture of the middle of the radius and ulna, was admitted November 13th; two splints, well padded on the sides next to the arm, and extending from the elbow beyond the fingers, were loosely applied, and the arm placed in a sling. This dressing was continued until the patient's discharge, on the 19th of December, motion being occasionally made at the joints of the fingers, wrist, and elbow, to prevent stiffness.

A case of fracture of the leg, was admitted October 20th, the limb was placed in a fracture box, and an evaporating lotion applied to diminish the inflammation. A portion, however, sloughed, rendering the fracture compound. The patient's recovery was consequently not completed until the sixty-ninth day after the accident. This case exemplifies the advantage of the treatment by the fracture box in use in the hospital; the limb being simply placed on a pillow covered with oil-cloth, and the sides of the box drawn up, any application can readily be made without at all moving the parts, which cannot be the case where the limb is surrounded by a roller.

A case of fracture of the right thigh, at the middle, and at the lower third; of the left thigh, at the upper third, together with concussion of the brain, caused by an injury from a locomotive, was admitted December 24th; death took place December 26th.

A case of fracture of the skull, with considerable depression of the bone, caused by blasting, was admitted December 19th, four hours after the injury. The man was comatose, but with a feeble pulse, and had been a hard drinker. After removing the hair, an incision was made on the scalp, over the occipital bone, and a piece an inch and a half square drawn out of the brain by Dr. Harris. Near an ounce of cerebral matter followed its removal; the wound was drawn together and dressed with lint, and the next day poulticed. The man was sensible, sat up in bed and answered questions readily; pulse slow, regular, and weak: ordered tinct. valerian. f℥j, every two hours. This state of things continued for four days, the man being sensible, complain-

ing of no pain, and demanding no treatment, but occasional purges of calomel, &c. On the fifth day there was no union of the wound, but some suppuration, with indications of hernia cerebri, the protrusion being the size of a walnut. It continued to increase, notwithstanding pressure was used to some extent. Delirium ensued, with sloughing of the protruding mass, and on the ninth day he died. An examination after death was refused, and the opportunity lost of comparing the case with two preceding cases of hernia cerebri, lately in the hospital, in which large abscesses were found in the brain, near the seat of injury.

A case of fracture of the leg, of contusion of the other leg and ankle, and of a lacerated wound of the thigh, caused by a rail-road car passing over the patient, was admitted December 24th; mortification followed, and the man sank rapidly, dying five days after admission.

FOREIGN SUMMARY.

Case of Rupture of the Inferior Vena Cava.—A man, fifty years of age, had suffered, in youth, from repeated attacks of hemoptysis. For the last eighteen years he had also been afflicted with hemorrhoids, and a varicose state of the veins of the foot, which had gradually advanced to the thigh and groin. Three or four weeks before his death, the patient had been ill with a slow intermittent fever, from which he was beginning to recover, when, four days before his decease, he was suddenly seized with pains in the breast, accompanied with oppression, vomiting, and diarrhœa. These symptoms gradually subsided, and the patient seemed convalescent, when he had a relapse. He was attacked with violent pain in the right lumbar region; his respiration was excessively oppressed, and he was incessantly complaining of want of air. Convulsions followed, and death took place at the end of four hours.

Some traces of chronic inflammation were found in the lungs. The right auricle of the heart was considerably enlarged, while its parietes were much thinner than in the normal state. The right ventricle was also much thinner than usual. The pericardium contained two or three spoonsful of pure serum. The liver was very black, soft, and congested with blood, the vena portarum was dilated, and the spleen twice its ordinary size. The whole abdominal venous system was in a state of remarkable dilatation. The right lumbar and inguinal regions contained a quantity of coagulated blood. By careful examination the course of the hæmorrhage was traced to the inferior vena cava, near its junction with the iliac vein. This portion of the vessel was remarkably dilated, and presented several openings of the size of a pin's head. The parietes of the vein did not appear abnormally thin, although the dilatation occupied its entire calibre.—*Berlin Medicin. Zeitung.*

Diosma Crenata—The Buchu.—The natives of the Cape of Good Hope ascribe the most extraordinary virtues to the leaves of the family of the diosmeæ, and to some species of plants which approach to it in general characteristics. Botanists have subdivided this genus, and the buchu now belongs to one of those subdivisions called barosma. It is owing to the perseverance and unwearied attention of the late Dr. Reece that we are now familiar with the intrinsic merits of this medicine, and to the earnestness with which he inculcated his own views must be ascribed its introduction into practice. From him I gathered all the information I possess upon this plant, and likewise a vast deal of useful knowledge of the value of some of those of which I have already spoken. He wrote a little pamphlet, in the year 1825, which embraces some very favourable reports of different authors and physicians who had recommended this drug; he was not too sanguine in his estimation, and I have had every reason to be satisfied with the trials I have made of the preparations he employed. It is a shrub which flowers at the Cape of Good Hope throughout August, September, and October; it is perennial, erect; it rises to the height of about two feet; the branches have somewhat of a purplish colour; the leaves opposite, ovate, crenate, of a dark-green colour in the upper lamina, somewhat paler on the lower; they are full of small transparent punctures, particularly at the edge. The flowers are solitary, on short pedicles, white, or of a pale reddish hue; the calyx consists of five deep ovate segments, the corolla of five elliptic oblong segments, slightly spreading; the nectaries are five linear lanceolate scales, crowning the germen, the filaments are five, awl-shaped, bearing ovate incumbent anthers; the germen is superior, the style erect, the length of the stamens, with a simple stigma; the capsule is ovate, containing an oblong solitary seed, inclosed in an elastic coat. The leaves, as they are imported into this country, have a very agreeable aromatic odour, by which they are distinguished from senna, to which they bear a very striking resemblance; the short petiole which remains attached to them is channelled, the upper surface smooth, and has a yellowish-olive hue; the under surface is somewhat paler, and is studded with large glands, having each of them an excretory pore. These afford, on distillation, an essential oil, resembling a mixture of oil of rue, juniper, and camphor; this odour has been imitated, and Dr. Reece states, that a species of senna imported from the Cape was artificially prepared by a mixture of this kind; the extractive matter is slightly bitter and mucilaginous. The virtues of the leaves are imparted to boiling water by infusion, and also to proof spirit. The saturated tincture and the extract, when carefully prepared, so as to retain the volatile parts, are the best preparations. M. Cadet has made an analysis of the leaves, and in the third volume of the "Journal de Chimie" it is given to us, and we learn from it that they contain essential oil, gum, extractive

matter, chlorophylle, acid, resin. The London and Dublin Pharmacopœias have both received infusions into their formulas; that of the former is thus made:—Take of buchu an ounce, boiling distilled water a pint; macerate for four hours in a lightly covered vessel, and strain. An ounce or two ounces may be given in those cases in which this drug is required; but a tincture is a very useful preparation: that of the Dublin College is formed of two ounces of the buchu leaves to a pint of proof spirit, and maceration is to go forward for seven days. Dr. Reece employed a tincture much more abounding with the volatile oil, and a very excellent medicine I have always found it. He imitated a preparation made by the natives at the Cape, and highly approved of by the Dutch, which they call buchu brandy; it is formed by distilling the leaves in the dregs of wine, and in this state they consider it as a sovereign remedy for all chronic disorders, and even for acute ones of the stomach and bladder. Thunberg observes that the Hottentots reduce the leaves of a plant, which he describes "uniflora, pulchella, crenata et betulina cognomine buchu," and this is done by pounding them by stones; they besmear the body with this, made up with fatty matter, whence they have a disagreeable and very remarkable odour. Burchell, in his "Travels in Africa," likewise mentions the uses to which the Hottentots applied the leaves of this plant, more especially noticing that they made an application of an infusion to recent wounds. In Holland these leaves were introduced medicinally much earlier than they were in this country, and their employment received the sanction of high medical authority.

In the different varieties of mucous discharge from the urethra, whether they be the result of long-continued excess, or of momentary irritation, the leaves of the buchu, either in the form of infusion, or of tincture, afford the most certain prospect of recovery. Persons of relaxed habits, in whom a collection of mucous not unfrequently occurs in the bulbous part of the urethra from the prostate gland and the seminal vessels, which is mistaken for the generative secretion, and those who, in early life, are subject to a collection of clear transparent mucus in the urethra, will find this medicine completely arrest the progress of these disordered states. One of the volumes of the "Dublin Medical Transactions," contains a communication from Dr. M'Dowall on the beneficial effects of the buchu leaves in cases of irritative affections and chronic inflammation of the bladder, urethra, &c. The doctor observes, that the chronic form of inflammation very frequently affects the mucous membrane of the bladder, and, when neglected, extends up the ureters to the kidneys, producing a degree of local irritation sufficient to disturb the general health. These complaints may, in general, be traced to mismanaged gonorrhœa, retention of urine, disease of the prostate gland, stricture of the urethra, the action of calculi, and the rude use of the bougie. The saturated tincture, and the extract, when carefully prepared, so as to retain the volatile parts, are the best preparations. The dose of the former is two teaspoonsful, and of the latter ten grains.—*Dr. Sigmond's Lecture—Lancet.*

Sugar in the blood.—The question of the presence of sugar in the blood of diabetic persons, has long been a matter of dispute amongst chemists. It appears certain, however, that Ambrosiani extracted saccharine matter in a state of purity from the serum of diabetic blood, while recent experiments of Mr. M'Grigor lead to the idea that it exists in several of the excretions also. The following process is described by Dr. G. O. Rees, in the last number of "Guy's Hospital Reports:"

"The mass of blood is to be evaporated to dryness, over a water-bath; the dried mass to be comminuted, and digested for several hours in boiling water: the aqueous solution is to be filtered off, evaporated to dryness, and the dried residuum digested in alcohol of sp. gr. 0.825: the alcoholic solution so formed is to be filtered, or carefully poured off, evaporated to dryness, and the dry mass treated several times with rectified ether, which dissolves out urea, and also some fatty matter; leaving behind the sugar, in admixture with osmazome and chloride of sodium: this mass, on being dissolved in alcohol, and the solution allowed to evaporate spontaneously in a flat glass dish, affords mixed crystals of alkaline chloride and diabetic sugar; which are easily distinguishable from each other, and allow of being separated mechanically, by shaking them up in alcohol, when the chloride sinks; and the sugar, being principally collected above, may be removed, for examination, by careful use of the spatula: the alcohol must not, of course, be allowed to remain long in contact with the crystals, as it would re dissolve them. It is a matter of surprise, that sugar has not been long ago detected in the blood of diabetic patients, though not separated from it; for the alcoholic extract of the serum, when mixed with water, will, after a few days, give off carbonic acid; which, in addition to the sweetish taste, and syrupy smell of the evaporated alcoholic extract, is a sufficient evidence of the presence of sugar. The following is an analysis of 1000 grains of diabetic serum:

Water	908.50
Albumen (yielding traces of phosphate of lime and oxide of iron, on incineration)	80.35
Fatty matters	0.95
Diabetic sugar	1.80
Animal extractive, soluble in alcohol, urea	2.20
Albuminate of soda	0.80
Alkaline chloride, with traces of phosphate Alkaline carbonate, and trace of sulphate, the results of incineration	4.40
Loss	1.00
	100.000

Lancet.]